Appl. No. 10/823,098

Amdt. dated 01/19/2009

Reply to Office action of 08/26/2008

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the

application:

**Listing of Claims:** 

1.(currently amended) A method to dissipate heat generated by a coil located within a

[[micro-]]structure, that is on a substrate, comprising:

forming a thermally conductive pedestal that originates at said substrate and

extends upwards therefrom; and

forming a layer of thermally conductive material that thermally connects said coil

to said substrate through said pedestal, thereby providing an unbroken thermal path

between said coil and said substrate.

2.(previously presented) The method of claim 1 wherein said layer of thermally

conductive material and said conductive pedestal have a thermal conductivity between

100 and 400 W/m.K.

3. (previously presented) The method of claim 1 wherein said layer of thermally

conductive material is selected from the group consisting of copper, tungsten,

molybdenum, silicon, ruthenium, rhodium, and iridium.

4

Appl. No. 10/823,098

Amdt. dated 01/19/2009

Reply to Office action of 08/26/2008

4. (previously presented) The method of claim 1 wherein said layer of thermally

conductive material has a thickness between 1 and 2.5 microns.

5. (previously presented) The method of claim 1 wherein said pedestal has a cross-

sectional area that is between 10,000 and 15,000 sq. microns.

6. (previously presented) The method of claim 1 wherein said coil generates heat at a

rate between 4 and 15 milliwatts.

7-24. Canceled

25. (currently amended) A heat extractor for a [[micro-]]structure that includes a coil

and a substrate, comprising:

a thermally conductive pedestal that originates at said substrate and extends

upwards therefrom; and

a layer of thermally conductive material that thermally connects said pedestal to

said coil, thereby providing an unbroken thermal path between said coil and said

substrate.

26. (previously presented) The heat extractor described in claim 25 wherein said layer

of thermally conductive material and said conductive pedestal have a thermal

conductivity between 100 and 400 W/m.K.

5

Appl. No. 10/823,098

Amdt. dated 01/19/2009

Reply to Office action of 08/26/2008

27. (previously presented) The heat extractor described in claim 25 wherein said layer

of thermally conductive material is selected from the group consisting of copper,

tungsten, molybdenum, silicon, ruthenium, rhodium, and iridium.

28. (previously presented) The heat extractor described in claim 25 wherein said layer

of thermally conductive material has a thickness between 1 and 2.5 microns.

29. (previously presented) The heat extractor described in claim 25 wherein said

pedestal has a cross-sectional area that is between 10,000 and 15,000 sq. microns.

6